









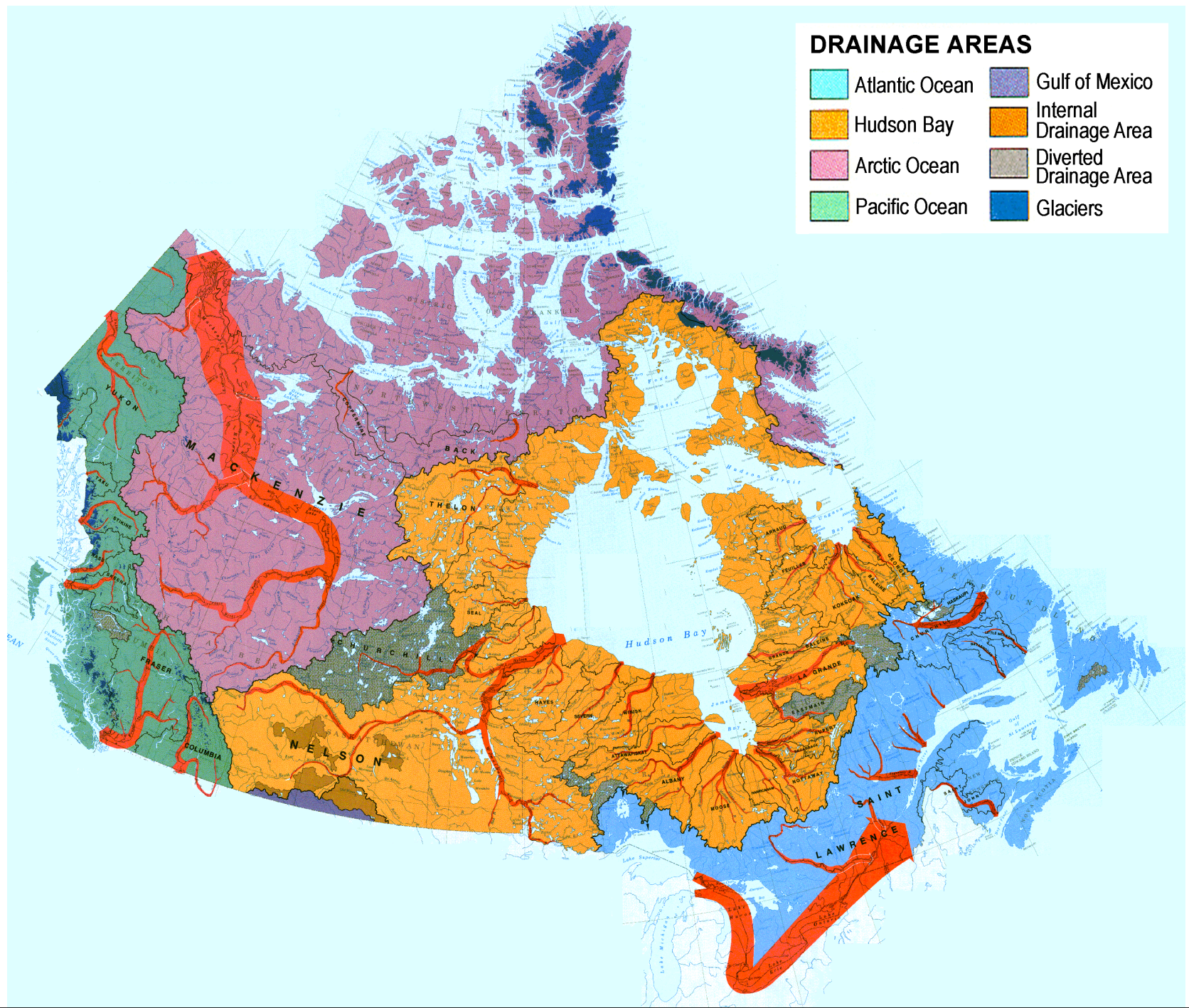
# Promoting Uptake of Water Efficient Technology



A Canadian Perspective

## DRAINAGE AREAS

 Atlantic Ocean	 Gulf of Mexico
 Hudson Bay	 Internal Drainage Area
 Arctic Ocean	 Diverted Drainage Area
 Pacific Ocean	 Glaciers



*In the beginning...*

## **Water is a shared responsibility**

- **National:** CCME (inter-governmental cooperation (Canada-wide standards); ENGOs (public and stakeholder engagement)
- **Federal:** Industry Canada; Environment Canada; CMHC; Infrastructure Canada; National Research Council (Federal lands and facilities, Federal Acts, legislation and policy); National guidance, codes and protocols; funding programs
- **Provincial/Territorial:** Primary responsibility for water; legislation and policy
- **Municipal:** Day-to-day delivery of water services



# Progress on water use efficiency

## A snapshot

- **National:** *National Action Plan for Municipal Water Use Efficiency*; Shared Experiences Data-base (CWWA); limited testing of water efficient technologies
- **Federal:** Public outreach/awareness programs; CMHC (residential water use and quality)
- **Provinces:** BC, Alberta & Manitoba Water Conservation Strategies
- **Municipal:** local pricing structures; water efficiency programs; infrastructure management (e.g., leak detection and repair)





# Entering a new era of sustainable water use

Despite progress, Canada is still the second highest per capita user of water in the world. Canada faces many of the same pressures as the U.S. - pressures that demand more sustainable use of water resources:

- economic realities of infrastructure development and maintenance
- water use conflicts
- drought in prairies
- urban sprawl
- climate change
- uncertainty about ecological water needs



# Environment Canada

## Sustainable Water Use Branch

*Promote the responsible use of water resources in Canada as a pillar of sustainable development and the continued prosperity of Canadian economy, society, and environment*

- Engaging others (partnership development and strategic alliances)
- Knowledge development (social, economic and environmental sciences)
- Policy development
- Enabling others



# Policy development

## Objective

- Develop and promote an appropriate mix of tools, and instruments to support SWU across key sectors of Canadian society.

## Intermediate Outcomes

- Develop and advance consistent standards, benchmarks and indicators for water use efficiency across key sectors (including water re-use and recycling).
- Promote innovation in development and application of economic instruments (e.g., full cost pricing, valuation of water; permit trading)
- Promote innovation and uptake in water use efficiency technology (e.g. WaterStar Program)



# CMHC

- Canada Mortgage and Housing Corporation (CMHC) was established as a Crown Corporation in 1946 by the Canada Mortgage and Housing Corporation Act to carry out the provisions of the National Housing Act.
- CMHC is the key Canadian source for reliable and objective information on national and regional housing issues.





# CMHC - Residential water use and quality

Research strategy includes:

- Improving building performance through enhancement of residential water use
  - Technology testing and uptake
  - Influencing community water efficiency programs



# Shared goals for sustainable water use

**Goal:** Sustainable and equitable use of water to the benefit the environment, economy and society.

**What this means:** Renewed focus on managing demand within limits.

**How will we get there:** The right mix of technology, policy, and consumer engagement and effective partnerships:

## **Effective policy and governance**

- Consistent policy, regulation and codes
- Advancing the use of economic instruments (water pricing)
- Effective partnerships (intergovernmental and multi-stakeholder)
- “Green investment” (e.g., conditions on infrastructure funding)

## **Effective water efficient technology:**

- Promoting technological innovation

## **Effective consumer engagement**

- Motivating consumers (make benefits tangible e.g., rebate schemes)



# Key Challenges in advancing use of water efficient technology in Canada:

- Limited capacity in Canada to test and promote effective technologies
- Consumer uncertainty re efficacy of water efficient technology
- Cost to consumers may outweigh perceived benefits
- National plumbing code
- Water re-use and recycling guidelines



# Key thrusts to promote uptake of water efficient technology (Back to the beginning...)

- Promote consistency with water efficiency provisions elsewhere in North America
- **Encourage development of labelling of water efficient products, equivalent to the current labelling for energy-using appliances.**
- Promote uptake at all levels through appropriate incentives (awareness; rebates; marketing; investment levers)
- Review provincial programs, policies, regulations and codes, to identify and remove impediments to water efficiency.

***Partnering on a WaterStar program with other jurisdictions a key step forward in achieving our own goals.***



# Conclusion

Consistent water efficiency labelling program key element of sustainable water use in Canada but...

- Needs to be coupled with other policy, economic and marketing measures to ensure uptake.
- Working with others increases our shared capacity to make this work.

